ABSTRACT

The present invention concerns the structure of and methods of constructing indicating instruments with slim profiles. The indicating instrument comprises a meter movement and a circuit board. The main body of the meter movement is situated in an aperture in the circuit board. With this placement, the front end of the body of the meter movement extends a distance in front of the circuit board and the back end of the meter movement body extends a distance behind the circuit board. Through appropriate selection and arrangement of any components on the circuit board, the circuit board can be constructed such that none of its components extend beyond the distance that the meter movement extends on either side of the circuit board. In this manner the space needed for the meter movement and the circuit board and its components collapses into the same area. A light plate may be added to the circuit board and meter movement. The light plate provides a structural framework for the indicating instrument. The circuit board and meter movement may be mounted to the light plate. In this manner, the internal components of the indicating instrument are all held together and can be calibrated and tested without the addition of any further components.